

ANAEROBIC DIGESTERS IN WASHINGTON STATE

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Anaerobic Digester (AD) Management of Manure and Organic Feedstocks¹

- Anaerobic digestion of manure and organic feedstocks
 - Removes manure from lagoons, reduces odors
 - Reduces greenhouse gas emissions (methane)
 - Removes organics from landfills
 - Creates potential carbon credit offsets
- Beneficial use of AD digestate
 - Methane gas – generates renewable electricity or biogas – replace petroleum fuel
 - Liquid – nutrient recovery – replace synthetic fertilizer
 - Solid – animal bedding, soil amendment – replace peat moss

AD Operations in Washington

Existing AD Operations	County	Feedstock
VanderHaak Dairy	Whatcom	515 cows, eggs, chicken fat, artificial crab, cheese sauce, pre-biodiesel screenings, breeding, milk
DeRuyter Dairy	Yakima	2,854 cows, cheese whey, milk
WSU Research	Whitman	25 cows, other organics
Under Construction AD	County	Feedstock
Qualco Energy	Snohomish	1,600 cows, cafeteria waste, brewery waste
Farm Power Northwest	Skagit	2,550 cows, chicken processing waste
Proposed AD	County	Feedstock
Mason County Conservation District	Mason	1,060 cows, fish processing waste, yard clippings
Cedar Grove Landfill	Snohomish	Organic fraction municipal solid waste

Note: Potential for 135 dairy AD operations in Washington¹

AD Stakeholder Workgroup

- Workgroup: 21 Stakeholders, 51 other interested parties
- Completed two workgroup meetings: AD accepting organic solid waste may require solid waste handling permit, AD feedstock types (manure, organic solid waste, prohibited wastes), potential for some ADs to be exempt from solid waste handling permit requirements
- Project monthly meetings to continue into 2009: discussing of solid waste handling requirements
- Anticipate CR101 filing in 2009 to add AD solid waste handling standards to WAC173-350

¹ Climate Change Action Team, Recommendations for the Development of Agriculture Sector Carbon Offsets in Washington State, October 2008